

Abstract

*Application  
Program*

A data model whereby individual activities are defined as activities. 5 activities are defined to no more than one concerning the state of resource on which the activity is scheduled, and a list of alternative resources, if any. Activities are 10 linked to each other via auxiliary objects, which contain information concerning the minimum and maximum time between activities. Orders may contain input and/or output interface nodes, representing the materials consumed and produced by the order. Each output interface node 15 representing a quantity of material created from one order is linked via an auxiliary object to respective input interface node or nodes from other orders that are scheduled to receive that material. Order anchors are defined whereby a planning algorithm can easily reference an order by its 20 order number in a database table. Planning object anchors allow the planning algorithm to access all the orders for a given material, and resource anchors permit access to all activities scheduled for that resource.